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ABSTRACT

Occupational stereotyping appears very early in children. Both boys and girls place specific boundaries when considering occupational choices. This study investigated 136 students in the 4th, 5th, and 6th grades for occupational sex-role stereotyping. Independent variables investigated were: gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self-reported grades, and size of school. The dependent variable was occupational sex-stereotyping scores. The results of the study appeared to support the generalization that students of non-white ethnic groups exhibit occupational sex-role stereotyping more than white students. In addition, the results indicate that none of the following are associated with occupational sex-role stereotyping: gender of the students; grade level of the students; job status of the mothers of the students; family structure in which the students live; formal education of the fathers and mothers of students; self-reported grades of the students; and the size of school attended by the students. Recommendations are made that the study be replicated using the following: (1) a large random sample; (2) additional independent variables; (3) a different instrument; (4) other grade levels; and (5) other geographical locations. Contains 30 references and 9 tables. (KW)

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OCCUPATIONAL SEX-ROLE STEREOTYPING IN THE ELEMENTARY SCHOOL

being

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial Fulfillment of the Requirements for
the Degree of Master of Science

by

Darlene A. Smith
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Graduate Committee Approval

The Thesis Committee of Darlene A. Smith hereby approves her thesis as meeting partial fulfillment of the requirements for the Degree of Master of Science.

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Abstract

The purpose of the researcher was to investigate occupational sex-role stereotyping in 4th, 5th, and 6th grade students. The independent variables investigated were: gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self reported grades, and size of school. The dependent variable was Occupational Sex-Stereotyping scores. The sample consisted of 136 elementary students. Nine composite null hypotheses were tested at the .05 level. Each composite null hypothesis was tested employing a three-way analysis of variance (general linear model).

A total of 41 comparisons were made plus 21 recurring. Of the 41 comparisons 9 were for main effects and 32 were for interactions. Of the 9 main effects 1 was statistically significant at the .05 level. The statistically significant main effect was for ethnic group. The results indicated that students of other ethnic groups (Hispanic, African American, Native American, and Asian) had statistically greater occupational sex-role stereotyping than white students.

The results of the present study appeared to support the following generalizations:

1. students of other ethnic groups (Hispanic, African American, Native American, and Asian) occupational sex-role stereotype more than white students,
2. gender of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
3. grade level (4th, 5th, and 6th) is not associated with occupational sex-role stereotyping,
4. job status of the mothers of 4th, 5th, and 6th grade students is not

associated with occupational sex-role stereotyping,

5. family structure in which 4th, 5th, and 6th grade students live is not associated with occupational sex-role stereotyping,
6. formal education of the fathers of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
7. formal education of the mothers of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
8. self reported grades of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping, and
9. the size of school attended by 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping.

Introduction

Overview

Occupational stereotyping appears early in children. At very young ages, children choose stereotyped jobs for themselves (O'Keefe & Hyde, 1983). In a study conducted by Papalia & Tennent (1975, cited in O'Keefe & Hyde, 1983), children 3 years 8 months of age to 5 years 8 months were asked "What do you want to be when you grow up?" and "What do you think you will really be?" (p. 483). Stereotyped occupations were chosen by both age groups.

> With occupational sex stereotyping, both sexes lose. We need scientists with "polished nails" if they choose. Girls need to know they can achieve and still wear gardenias in their hair. We need strong men teaching gentleness to children. . . . . The Keyword is choice. (Hageman & Gladding, 1983 pp. 286-287)

What is a stereotype? According to Webster's Dictionary (P.S.I. & Associates, 1987) a stereotype is defined as, "A standardized mental picture that is held in common by members of a group and that represents an oversimplified opinion, affective attitude, or uncritical judgment" (p.1156). "Sex-role stereotyping is defined as the process by which a person assigns a gender to certain roles or behaviors" (Reid & Stephens, 1985, p. 267). These stereotypes seem to be fabricated in that there is little or no background information to support and explain their very existence (Reid & Stephens).

Beuf (1974, cited in Reid & Stephens, 1985) reported both boys and girls place specific boundaries when considering occupational choices.

> Evidence exists that both girls and boys perceive the gender-

> specific limits placed upon their occupational choices. Boys recognize their roles as open and varied; they typically cite a wide range of adulthood goals, for example, builder, doctor, fireman, policeman, pilot. Girls view their roles as circumscribed and fixed; consequently, they name few as their potential adult outcomes, for example, mother, teacher, nurse. (p. 269)

Adams & Hickens (1984) maintained restricted choices associated with sex-role stereotyping can have negative effects on both males' and females' training, vocational commitments, incomes, and status. Research reported by Schlossberg & Goodman (1972, cited in Hageman & Gladding, 1983), maintained children see traditional occupations for both men and women and will continue with this pattern unless a strong and motivated effort is implemented to restructure these positions.

Henshaw (1992) conducted a study about the extent to which primary school children's thinking is influenced by gender stereotyping. The sample consisted of 30 children aged between 8 and 9. Four tasks were presented to the children. Three of the four addressed toy preferences, activities and occupations. The other pertained to the concept of color. The object of the researcher was to see if the children saw female roles as being more flexible than those of males. According to Henshaw (1992), ". . . . the early school years perceptions of roles and behaviours which are appropriate for either boys or girls are well-formed" (pp. 229). Around the age of 8 or 9, children recognize and develop a sense of what is acceptable according to gender roles. Henshaw (1992) reported teachers seem to criticize boys for more feminine types of play but, girls were more accepted when engaged in typical male play. It appeared boys' ideas of stereotypes are more fixed than those of girls. "One area of gender difference

with particularly clear adult ramifications is occupational sex-stereotyping. How flexible or rigid these early attiudes are undoubtedly contributes to later vocational information seeking and choice" (Tremaine, Schau, & Busch, 1982, p. 691). Children from ages 3 to 10 years experience and process information on gender differences which in turn influences behaviors. The context of these experiences in the early years has a direct relationship to vocational choices in later life. Howe (1971, cited in Barnhart, 1983) stated the following:

> A study of stereotypic views of children may provide a basis for evaluating various aspects of the educational system so that there is a chance for all children to develop their minds and bodies to the fullest extent possible. Helping children break away from the traditional sex typed views of occupational roles in pursuing interests, developing talents, and growing to full potential. (p. 167)

A study conducted by Cann & Haight (1983) used a sample of 169 children from K, 1, 2. Two dolls were used in the procedure one male and one female. A list of 16 occupations was used and the child responded as to who could do the job better. Cann & Haight (1983) maintained that if children believe one sex is better equipped for certain occupations than the other there will be serious repercussions. If this line of thinking is ingrained in a child's occupational attitude early in life and role models and media support and enhance these thoughts, chances of choosing a non-traditional career path would seem minute.

> For there to be a successful shifting of attitudes, so that barriers to non traditional employment can be crossed by males and females, there must be an effort to insure that children are provided with a clear understanding that occupations are not categorized male-only

and female-only groupings. (Gettys & Cann, 1981, p. 307)

Hageman & Gladding (1983) reported there is still a long road ahead before jobs will be seen as "sex-free". The use of art and awareness techniques in career guidance programs will influence children to feel free to make a sex-free choice.

Occupational Sex-role Stereotyping in Education

Burton (1974, cited in Barnhart, 1983) stated the following:

> A basic tenet of our society is that all Americans should have equal opportunity to pursue interests, develop talents and grow to full potential. Yet when the ideal society endorses and the actual practice of society regarding this equality are examined, a conflict occurs. It should become the duty of the school to hold true to the basic ideal, to cease reflecting deviations, and to take positive steps to correct and to reshape the "reality". (p. 187)

Teachers' gender and attitudes toward child and career development, the gender of the principal, and children's literature and textbooks all can affect the child's ability to set goals and limitations when navigating through occupational choices. Barnhart (1983) employed a stratified sample with 6 groups being established. Each group consisted of 25 girls and 25 boys ages 6, 8, and 10. The total number of the sample was 300. Data were collected using the Occupational Role Stereo-Type Scale (ORSS). The instrument consisted of 18 pictures of stereotyped occupations. These were shown to the child and each child chose whether the job should be a male job or a female job. Sex-typing was found to be high for the 18 occupations depicted. Most of the occupations were found as traditional sex-types roles by those involved. According to Barnhart, the education system can knowingly or unknowingly affect children and

their ideas of occupational roles. Finn (1979, cited in Mancus, 1992) found children identified more with teachers of the same sex. Mancus' (1992) generalization found the presence of men as teachers had a greater influence on boys as well.

> . . . boys will be more likely to see themselves as more academically competent and thus be more inclined toward achievement when they have some male teachers. Likewise, they will be more likely to share authority and express nurturing behavior when they see male teachers doing so. (pp. 126-127)

Hageman & Gladding (1983) reported "Boys need to know they can be caring and still drive trucks if they choose" (p. 287).

A study by Paradise & Wall (1986) was conducted to examine the influence male and female principals had on 1st graders' concepts of school principals and teachers. The subjects were 190 children in1st grade all having female teachers. The children were exposed to videos and photographs portraying varying gender combinations of teachers and principals. Each child was then asked, "Who could be a teacher?" and "Who could be a principal?" (p. 3). The following was reported:

> The most interesting finding of the study is that children with female principals were more likely to indicate that either men or women could be a school principal than children with a male principal. Thus, the presence of a counterstereotypic role model for principal seems to have exercised some influence on children's perceptions as to whether men or women could be school principal. (p. 5)

In another study by Hageman & Gladding (1983), a sample of 90 sixth

graders and 84 third graders were given a survey during art class on their willingness to strive toward a non traditional occupation. The children were asked what they wanted to be if they could be anything and then what they really thought they would be. Third grade students were influenced by a role model as to who could become principal, a male or female (Hageman & Gladding). One of the schools in the study had just replaced a male principal with a female principal. The other school had a male principal for over 10 years. An unexpected finding was the students with the female principal had the opinion a male or female could become a principal; however, the students in the second school had opposing opinions. "Whereas role models may not encourage children to consider an occupation, they do make such exploration possible" (Hageman & Gladding, 1983, p. 285).

Children's literature books and textbooks also play a part in shaping the stereotypical attitudes of children. "After sitting through years and years of lessons that rarely mention women (or only mention them in stereotyped contexts), it is no wonder that many students take with them from school a sex-stereotyped view of life" (Weitz, 1977, p. 85). In a study conducted by Knell & Winer (1979) a sample of 90 children was employed. The children ranged in age from 3.0 to5.7. The researcher attempted to show that reading material can be an influence for a child to associate a person's gender with a particular occupation. The children were assigned to one of four groups. Each group was read 12 stories. One group had only traditional occupations represented. The second had only nontraditional. The third was an equal mixture of nontraditional and traditional. The fourth was a control group consisting of stories that made no reference to sex typed occupations. Girls were found to give more nonstereotyped responses than boys; however, girls in the traditional group did

respond with fewer nonstereotypic choices than girls in other groups. In the traditional group girls and boys seem to give more stereotyped responses than in any of the other groups. Knell & Winer (1979) contended "The results of this study certainly suggest that reading material might affect the development of attitudes, especially by reinforcing ideas or beliefs from other sources" (p. 86).

Gonzales-Suarez & Ekstrom (1989) maintained that supplemental materials could be used by teachers to help close the stereotyping gap until major textbook revisions could be made. According to Gonzales-Suarez & Ekstrom, improvements have begun to take place in the textbook as a whole. However, with regards to male stereotyping not much has changed. Adams & Hicken (1984) found the following: "Nonetheless, choice of reading material does appear to have a significant influence on sexism and restricted occupational choices. Parents, teachers and family life educators should be cognizant of the influences of reading material on children's choice of occupations (p.306).

Gender and Occupational Sex-role Stereotyping

A study conducted by Garrett, Ein & Tremaine (1977) included 120 first graders, 110 third graders, and 125 fifth graders. It was designed to examine age changes,sex differences, and the stereotyping of occupational choices. An instrument was administered which consisted of a list of 40 occupations. Students chose who they thought could do a job. The trend throughout the grade levels was 1st graders did more stereotyping and there was a gradual decrease in stereotyping up through fifth graders. Boys were more stereotyped than girls.

Adams & Hickens (1984) replicated a study by Looft (1971). Historical and cultural differences were considered and the impact they have on children's occupational choice. The sample consisted of 108 children frrom grades

preschool, K, 1, 2, and 3. Each child was interviewed and asked "What would you like to be when you grow up?" and "Now, what do you think you really will do when you grow up?" This was designed to show what the child wanted and what the child expected. Adams & Hicken concluded the following:

> Young female children are, in the 1980's, aware of a broader number of occupational choices than they were in the 1970's, and remain highly interested in professional career options. But broadening preferences appear to be mitigated by negative or lowered expectations for girls. (pp. 305-306)

According to Reid & Stephens (1985), girls form their stereotyped ideas in the early years and they continue through adolescence. The stereotyped attitudes affect their career choices. With regards to a study implemented by Hageman & Gladding (1983), stereotyped attitudes of 3rd and 6th graders were surveyed. Sixth grade girls were willing to accept both men and women employed in traditional male jobs. In contrast, 6th grade boys thought only males should be employed in jobs like doctor, auto mechanic, and school principal. The boys also indicated women should fill positions of jobs like dental assistant and cleaner/servant. In the 3rd grade, girls were slightly more liberal than boys.

George & Schaer (1988) used a sample of 266 male and 226 female 2nd graders to replicate a study previously conducted 5 years ago. The study was conducted to see if boys and girls still choose stereotyped occupations. Children were asked their occupation preference for their adult occupation and had to indicate their choice among 17 job categories. "Results of this study show that 2nd grade students, especially males, are still selecting sex stereotyped future careers. . . . . The females . . . . selected a wider variety of job possibilities" (George& Schaer, p. 7). It seems that both males and females still

gravitate toward stereotyped occupations (George & Schaer). Archer (1984), in a study concerned with attitudes and opinions of children in grades K, 5, and 11, found Kindergarten females were more liberal than their male counterparts. But there were no statistically detectable difference between the 5th and 11th grade students. "Sex differences may be diminishing. Perhaps males are being socialized earlier to accept and adopt more legal egalitarian attitudes than they have in the past, suggesting that sex-role stereotyping is on the decline" (p. 8).

Kourilsky & Campbell (1984) conducted a study to measure sex differences in occupational stereotyping and to measure sex differences in risk taking, persistence and economic success. The sample consisted of 938 children in grades 3-6. Child self-report measures and teacher ratings were used. The following was found:

> With regard to occupational sex-stereotyping, we again found girls more likely than boys to believe that it is desirable for females to participate in traditional male occupations. Girls' attitudes toward occupational sex-stereotyping significantly changed from pre- to posttests. Boys' attitudes toward occupational sex-stereotyping changed somewhat in favor of female participation in 'traditional male occupations.' (Kourilsky & Campbell, p.63)

Grade Level, Age, and Occupational Sex-role Stereotyping

First grade students, in a study by Garrett, Ein, & Tremaine (1977), were found to have more stereotyped attitudes and 5th grade students seem to possess less stereotyped attitudes. The sample consisted of 1st, 3rd, anf 5th grade students. Boys at every grade level had more stereotyped attitudes than girls. Cann & Haight (1983) studied a sample of 173 children from grades K, 1,

and 2. It was found that older children had more stereotyped attitudes than those younger. These results coincided with a study conducted earlier by Getty & Cann (1981) in which younger children were found to have lower stereotyping tendencies. According to Getty & Cann, the reason was younger children do not totally comprehend the concept of stereotyping. Tremaine, Schau, & Busch (1982) suggested pre-school children did less stereotyping than1st or 2nd graders and older elementary children begin to decrease in their stereotypical attitudes.

According to Stericker & Kurdek (1982), stereotyping seemed to lessen with age. The researchers investigated the sex-role self concepts of children. The sample consisted of 238 children in grades 3 through 8. A modified Bem Sex Role Inventory was used. Male occupations were seen as being more manly by third and fourth graders. But 5th and 6th graders were more flexible in their ideas. It seems boys are more sex-typed in regard to occupations than girls. Alpert and Breen (1989) conducted a study using 1300 students, first through twelfth grade in one school district. Attitudes toward gender-roles in occupations and tasks were examined. First graders were found to be the most traditional. Liberality, defined as the number of either responses given, was on the increase across the grades.

In a study by Billings (1992), a sample of 164 children in grades second, fourth, and sixth were surveyed using the Occupational Sex-Stereotyping instrument. The instrument consisted of a list of 30 occupations. The child made a choice as to who could do that particular job, male only, female only, or both. Six composite null hypothesis were tested at the .05 level. Each composite null hypothesis was tested using three-way analysis of variance. It was found that 2nd graders had statistically detectabe higher sex-stereotyping scores than did

6th graders. Stericker & Kurdek (1982) also found that children's stereotyping male jobs seem to decrease as the age of the child increased.

Job Status of the Mother and Occupational Sex-role Stereotyping

One hundred and thirteen children from four pre-schools participated in a study conducted by Barak, Feldman, & Noy (1991). The researchers investigated the relationship among the following: parent's sex-stereotyping, the mother's job status, traditionality of the parents' occupation, and the traditionality of the children's vocational interests. Of the 113 mothers, 70 had jobs outside of the home and 43 did not. Barak, Feldman & Noy stated the following:

> As can be seen, while the correlations between the traditionality of the father's occupations with that of their children (both boys and girls) were low and insignificant, the correlations between the traditionality of mothers' occupations and that of both their sons and daughters were found to be significant. (p. 518)

Children whose mothers had non-traditional occupations seemed to show less stereotyped attitudes and interests.

According to a study by Paradise & Wall (1986), maternal employment outside the home and how it affects young children is unknown. Adams & Hickens (1984) generalized the following:

> Young children . . . have not yet come to expect to fulfill their occupational dreams. However, increasing visibility of women in the labor force, and the emergence of mothers that obtain significant and meaningful employment may over the coming years reduce this perceived limitation. (pp. 306-307)

Family Structure, Formal Education of the Father, Formal Education of the Mother and Occupational Sex-role Stereotyping

The results found by Billings (1992) indicated there was not an association between family structure and occupational sex-role stereotyping. Parent education was not found to influence occupational choices.

Ethnic Group and Occupational Sex-role Stereotyping

Archer (1984) implemented a study with a sample of mostly Caucasian students. The sample also included some Native Americans. Students were asked to indicate whether a male, female, or either one should do a particular occupation. "Liberality was defined as the number of 'either' responses given, thus representing a willingness to deviate from the traditional viewpoint" (p. 3). There was not a statistically detectable difference between the liberality of Caucasians and Native Americans. At the Kindergarten level the only two liberal responses made were expressed by Native American children. Older Native Americans were more likely to name occupations which required higher education levels than Caucasians. Native Americans do not stress completion of high school; therefore, if a Native American student attends school in later years it is likely because of choice and desire for an education.

A study by Frost & Diamond (1979) surveyed 666 fourth, fifth, and sixth graders from Black, Hispanic, and Anglo groups. Hispanics and Anglo girls chose more non-traditional jobs than did Black girls. There was not a statistical difference in boys' choices and ethnic background. Black boys tended to disallow girls from male-stereotyped occupations. But Anglo and Hispanic boys were more open to girls in stereotypical male jobs.

A sample of 387 Black children from a rural elementary school in Louisiana was part of a study conducted by Miller & Stanford (1987). The purpose of researcher was to extend the available information on norms for the quantity and range of occupational preferences among children. Black children were chosen

because they represented a population that is seldom studied. The children were asked in individual interviews "A (boy, girl) could be all sorts of things when (he, she) grows up. What are some of the things you would like to be when you grow up?" (p. 116) Boys named a longer and more varied list of occupations they could choose than did girls. "The specific nature of our study -- using all Blacks from a low socioeconomic class -- did not permit us to draw conclusions about the effects of race on the quantity and range of occupational preferences" (p. 120).

Summary

Most of the literature reviewed indicated that occupational sex-role stereotyping continues to occur among children today. This stereotyping appears to influence the choices of youth in their career selection which is supported by the research. Occupational sex-role stereotyping is depicted in many homes and schools. In the past, many studies were conducted to evaluate the variables which contributed to occupational sex-role stereotyping. Literature and textbooks have been found to have an effect on children and their perceptions of career options. Teacher gender also seemed to alter how a child viewed career opportunities. Be it positive or negative, homes and family constellations were shown to influence career choices as well.

The results of most of the studies reviewed indicated that boys held more stereotyped views in job selection and adaptation than did girls. Some researchers suggest that stereotyping has decreased slightly toward girls in traditional male occupations, but the boundaries toward boys have remained relatively firm. Exploring careers in an educational setting could possibly dispel some of the stereotyped attitudes that are expressed in our society. Influential variables and conditions in career choices and stereotyping from past to present

can be studied and dissected to help others learn more about themselves and bring about change and an awareness.

Statement of the Problem

The purpose of the researcher was to investigate occupational sex-role stereotyping in 4th, 5th, and 6th grade students.

Rationale and Importance of the Research

In order to decrease the occurrence of occupational sex-role stereotyping, counselors must become more aware and informed. Counselors may then use the information obtained from this study to assist students to contemplate and select choices for future occupations with a less restricted outlook on the scope of career choices.

The present study was exploratory. It contained more variables and in different combinations than were found in the related literature.

The results of the present study could be used by school counselors, teachers, administrators, boards of education, and college professors in developing school curricula, teacher inservices, counselor workshops, and effective programs to help students and families develop an awareness of career opportunities. An enrichment program could also be developed to expand students' knowledge of non-traditional careers.

The outcomes of this study will contribute to knowledge pertaining to several independent variables including gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self reported grades, and size of school.

The results from the present study provided information pertaining to the following questions:

1. Is there an association between gender and occupational sex-role

stereotyping in 4th, 5th, and 6th grade students?

2. Is there an association between grade level and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
3. Is there an association between job status of the mother and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
4. Is there an association between family structure and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
5. Is there an association between formal education of the father and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
6. Is there an association between formal education of the mother and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
7. Is there an association between ethnic group and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
8. Is there an association between self reported grades and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?
9. Is there an association between size of school and occupational sex-role stereotyping in 4th, 5th, and 6th grade students?

Composite Null Hypotheses

All null hypotheses were tested at the .05 level of significance.

1. The differences among the mean Occupational Sex-Stereotyping scores for 4th, 5th, and 6th grade students according to gender, grade level, and job status of the mother will not be statistically detectable.
2. The differences among the mean Occupational Sex-Stereotyping scores for 4th, 5th, and 6th grade students according to family structure, formal education of the father, and formal education of the mother will not be statistically detectable.

3. The differences among the mean Occupational Sex-Stereotyping scores for 4th, 5th, and 6th grade students according to ethnic group self reported grades, and size of school will not be statistically detectable.
4. The differences among the mean Occupational Sex-Stereotyping scores for 4th, 5th, and 6th grade students according to gender, family structure, and ethnic group will not be statistically detectable.
5. The differences among the mean Occupational Sex-Stereotyping scores for 4th, 5th, and 6th grade students according to grade level, formal education of the father, and self reported grades will not be statistically detectable.
6. The differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to ethnic group, formal education of the mother, and size of school will not be statistically detectable.
7. The differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to gender, formal education of the father, and size of school will not be statistically detectable.
8. The differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to job status of the mother, formal education of the father, and ethnic group will not be statistically detectable.
9. The differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to grade level, family structure, and formal education of the mother will not be statistically detectable.

Independent Variables and Rationale

The following independent variables were investigated: gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self reported grades, and size of school. These variables were investigated for the following reasons; few studies were found in which all or a similar combination of these independent variables were examined and the studies found provided inconclusive results.

Definition of Variables

Independent Variable

Information pertaining to the independent variables came from the demographic section of the questionnaire and school records. Nine independent variables were investigated. They were the following:

1. gender - two levels;
   level one - girls, and
   level two - boys;
2. grade level- three levels;
   level one - fourth grade,
   level two - fifth grade, and
   level three - sixth grade;
3. job status of mother - three levels;
   level one - part time,
   level two - full time, and
   level three - none;
4. family structure - levels determined post hoc;
   level one - biological parents,
   level two - mother or mother/stepfather, and
   level three - other;

5. formal education of the father - levels determined post hoc;
   level one - high school, GED, or less,
   level two - post high school, less than college degree, and
   level three - college degree or more;
6. formal education of the mother - levels determined post hoc;
   level one - high school, GED, or less,
   level two - post high school, less than college degree, and
   level three - college degree or more;
7. ethnic group - levels determined post hoc;
   level one - white, and
   level two - other;
8. self reported grades - levels determined post hoc;
   level one - A's & B's,
   level two - B's & C's,
   level three - C's, D's, & F's, and
   level four - A's, B's, & C's;
9. size of school - two levels;
   level one - 2A, and
   level two - 4A.

Dependent Variable

The dependent variable was scores from the Occupational Sex-Stereotyping Instrument (possible scores, 0-30).

Limitations

The following may have effected the results of this study:

1. sample was not random;

2. subjects were limited to two school districts in Southwest Kansas;
3. the dependent variable was the results from a self reporting inventory; and
4. only grades 4, 5, and 6 were included in the study.

Methodology

Setting

The research was conducted in two small cities in Southwest Kansas. The first city consisted of a population of approximately 3,179. Income is generated mainly from government employment, agriculture, and retail. There is only one elementary school located in this district. This school consists of grades K-6. The school's approximate enrollment was 550 students with a ratio of 1 teacher per 17 students (Chamber of Commerce, 1994).

The second city had a population of approximately 2,318. The major sources of income are governmentemployment, agriculture, and retail. The schools used in this district were the elementary school consisting of grades K-4 and the middle school consisting of grades 5-8. The approximate enrollment for the elementary school was 218 students with a ratio of 1 teacher per 14 students. The middle school enrollment was approximately 185 students with a ratio of 1 teacher per 13 students (Chamber of Commerce, 1994).

Subjects

The sample consisted of 4th, 5th, and 6th grade students from two schools in neighboring cities from Southwest Kansas. The first school was classified 4A (enrollment range 469-198) and the second was classified as 2A (enrollment range 120-77). These classifications are tabulated on the enrollment numbers of 10th, 11th, and 12th grade students attending the district on September 20th. These numbers are sent to the State High School Activities Association which then divides the schools into categories. This is conducted each school year.

There are 64 schools in the state of Kansas with 4A classifications. There are also 64 schools in the state of Kansas with 2A classifications (Kansas State High School Activities Association, 1994-95).

In the first school there were 4 sections of each grade level of which one section of each was surveyed. Of the students surveyed, 53 were attending the 4A school with 17 being in the 4th grade, 19 being in the 5th grade, and 16 being in the 6th grade. There were 22 girls and 31 boys in this school surveyed. These students were identified by the school counselor. In the seccond school there were three sections of each grade level of which two sections of each were surveyed. Eighty three students surveyed attended the 2A school with 27 being in the 4th grade, 24 being in the 5th grade, and 33 being in the 6th grade. There were 38 girls and 45 boys in this school surveyed. The researcher arranged times in person with teachers for administration of the instruments used in the study. The total number of students surveyed at both schools was 142 with 136 instruments being complete.

Instruments

Two instruments were employed in the present study. A Demographic Information Sheet and the Occupational Sex-Stereotyping Instrument.

Demographic Information Sheet. The Demographic Information Sheet (Appendix A) was prepared by the researcher after reviewing the related literature. This instrument addressed the following: gender, grade level, job status of mother, family structure, formal education of father, formal education of mother, race (ethnic group), self reported grades, and size of school.

Occupational Sex-Stereotyping Instrument. The Occupational Sex-Stereotyping Instrument (Appendix B) was adapted by Eichman from three studies (Bailey & Nihlen, 1983; Scheresky, 1977; and Kennedy, 1979; cited by

Eichman, 1987). The instrument consisted of a list of 30 occupations. The student had three choices, "male only," "female only," or "both". Students were asked to circle only one option for each of the 30 occupations.

Design

A status survey factorial design was employed. The following independent variables were investigated: gender, grade level, job status of mother, family structure, formal education of father, formal education of mother, race, self reported grades, and size of school. The dependent variable was scores from the Occupational Sex-Stereotyping Instrument. Nine composite null hypotheses were tested employing three-way analysis of variance (general linear model) at the .05 level of significance. The following design was employed with each composite null hypothesis:

composite null hypothesis number one, a 2x3x3 factorial design,

composite null hypothesis number two, a 3x3x3x factorial design,

composite null hypothesis number three, a 2x4x2 factorial design,

composite null hypothesis number four, a 2x3x2 factorial design,

composite null hypothesis number five, a 3x3x4 factorial design,

composite null hypothesis number six, a 2x3x2 factorial design,

composite null hypothesis number seven, a 2x3x2 factorial design,

composite null hypothesis number eight, a 3x3x2 factorial design, and

composite null hypothesis number nine, a 3x3x3 factorial design.

McMillan and Schumacher (1984) identified 10 threats to internal validity. The 10 threats were dealt with by the researcher in the following ways in the present study:

1. history - did not pertain because the present study was status survey;
2. selection - all subjects (in designated sections of each grade level) who

met the requirements, who were willing to participate, and return completed surveys were included;

3. statistical regression - did not apply because the present study was status survey.
4. testing - did not pertain because the present study was status survey;
5. instrumentation - did not pertain because the present study was status survey;
6. mortality - did not pertain because the present study was status survey;
7. maturation - did not pertain because the present study was status survey;
8. diffusion of treatment - no treatment was administered;
9. experimenter bias - data were collected by standard procedures and no treatment was administered; and
10. statistical conclusion - two mathematical assumptions were violated (random sampling and equal number of subjects in cells). Lack of equal numbers of subjects in cells was corrected by using the general linear model and the researcher did not project beyond the statistical procedures employed.

McMillan and Schumacher (1984) cited 2 potential threats to external validity. The 2 threats were dealt with in the following ways in the present study:

1. population external validity - the sample utilized was not random; therefore generalizations should be made only to similar groups; and
2. ecological external validity - the present study was a status survey and the instruments were administered following standard procedures.

Data Collection Procedures

The principals of each building were contacted personally and in writing (Appendix D) to inform them of the purpose of the research and to obtain

permission to survey 4th, 5th, and 6th grade students. Written permission was obtained from each of the involved principals (Appendix E). One section of each grade level at the 4A school was surveyed (selected by the school counselor) and two sections of each grade level at the 2A school were surveyed(selected by the present researcher). Appropriate times were scheduled with the teachers involved. Thirty minute intervals were allowed for administration of the instruments. The present researcher collected all data using standardized instruction (Appendix F). The researcher read introductory instructions. Then each student received a packet of materials consisting of a Demographic Information Sheet and the Occupational Sex-Stereotyping Instrument (Appendixes A and B). The researcher continued with the instructions and answered questions.

All returned copies of the surveys were examined by the researcher for completeness. School records were checked for some of the information of which students were not sure. Data were prepared by the researcher for main-frame computer analysis at the computing center at Fort Hays State University, Hays, Kansas.

Research Procedure

The researcher employed the following global operations in this study:

1. selection of topic;
2. precursory review of related literature;
3. topic narrowed and defined;
4. search conducted of related literature using ERIC, Psych. Lit., and Sociofile;
5. comprehensive review of related literature;
   instrument selected;

7. developed demographic sheet;
8. data collected;
9. research proposal compiled;
10. research proposal defended;
11. data analyzed;
12. thesis was written;
13. thesis was defended; and
14. final document was edited.

Data Analysis

The following were compiled:

1. appropriate descriptive statistics,
2. three-way analysis of variance (general linear model),
3. Bonferroni (Dunn) t-test for means, and
4. Duncan's Multiple Range test for means.

Results

The purpose of the researcher was to investigate occupational sex-role stereotyping in 4th, 5th, and 6th grade students. The independent variables investigated were : gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self reported grades, and size of school. The dependent variable was Occupational Sex-Stereotyping scores. The sample consisted of 136 elementary students. Nine composite null hypotheses were tested at the .05 level. Each composite null hypothesis was tested employing three-way analysis of variance (general linear model). The following design was used with each composite null hypothesis:

composite null hypothesis number one, a 2x3x3 factorial design;

composite null hypothesis number two, a 3x3x3 factorial design;

composite null hypothesis number three, a 2x4x2 factorial design;

composite null hypothesis number four, a 2x3x2 factorial design;

composite null hypothesis number five, a 3x3x4 factorial design;

composite null hypothesis number six, a 2x3x2 factorial design;

composite null hypothesis number seven, a 2x3x2 factorial design;

composite null hypothesis number eight, a 3x3x2 factorial design; and

composite null hypothesis number nine, a 3x3x3 factorial design.

The results section was organized according to composite null hypotheses for ease of reference. Information pertaining to each null hypothesis was presented in a common format for ease of comparison.

It was hypothesized in composite null hypothesis number one that the difference among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to gender, grade level, and job status of the mother would not be statistically detectable. Information pertaining to composite null hypothesis number one was presented in Table 1. The following were cited in Table 1: variables, group sizes, means, standard deviations, F values, and p levels.

Table 1: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Gender, Grade Level, and, Job Status of the Mother Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Gender (A)					
male	76	7.3	5.10	0.01	.9044
female	60	8.2	6.01		
Grade Level (B)					
4th	44	8.9	5.77		
5th	43	6.4	4.68	0.89	.4114
6th	49	7.7	5.82		
Job Status of the Mother (C)					
full time	74	7.7	5.72		
part time	42	7.7	5.52	0.10	.9081
none	20	7.7	4.94		
Interactions					
A x B				1.55	.2155
A x C				0.80	.4515
B x C				0.94	.4412
A x B x C				1.50	.2071

* The larger the value the greater the stereotyping, the possible score was 0-30.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 1 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number two that the differences among the Occupational Sex-Stereotyping scores of 4th, 5th, and 6th

grade students according to, family structure, formal education of the father and formal education of the mother would not be statistically detectable. Information pertaining to composite null hypothesis number two was presented in Table 2. The following were cited in Table 2: variables, group sizes, means, standard deviations, F values, and p levels.

Table 2: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Family Structure, Formal Education of the Father, and Formal Education of the Mother Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Family Structure (D)					
biological parents	84	7.7	5.71		
mother or mother/stepfather	34	6.9	5.74	0.80	.4534
other	18	9.2	3.86		
Formal Education of the Father (E)					
1**	73	8.5	5.00		
2	21	6.7	5.29	0.99	.3742
3	42	6.8	6.34		
Formal Education of the Mother (F)					
1**	72	8.6	5.26		
2	30	6.6	5.33	1.92	.1514
3	34	6.7	5.98		
Interactions					
D x E				0.82	.5165
D x F				1.96	.1240
E x F				1.89	.1175
D x E x F				***	***

* The larger the value the greater the stereotyping.
** 1 = high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.
*** The Analysis could not be completed due to the size and nature of the sample.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 2 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number three that the differences among the mean Occupational Sex- Stereotyping scores of 4th, 5th, and 6th grade students according to ethnic group, self reported grades, and size of school would not be statistically detectable. Information pertaining to composite null hypothesis number three was presented in Table 3. The following was cited in Table 3: variables, group sizes, means, standard deviations, F values, and p levels.

Table 3: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Ethnic Group, Self Reported Grades, and Size of School Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Ethnic Group (G)					
White	110	7.1	5.56	2.86	.0935
Other	26	10.1	4.70		
Self Reported Grades (H)					
A's & B's	69	6.7	5.73		
B's & C's	30	9.6	5.68	1.37	.2543
C's, D's, & F's	14	7.2	3.56		
A's, B's, & C's	23	8.6	5.13		
Size of School (I)					
4A	53	7.2	5.54	0.17	.6833
2A	83	8.0	5.51		
Interactions					
G x H				0.12	.9455
G x I				0.06	.8138
H x I				0.28	.8401
G x H x I				0.35	.7046

* The larger the value the greater the stereotyping.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 3 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number four that the differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th,

and 6th grade students according to gender, family structure, and ethnic group would not be statistically detectable. Information pertaining to composite null hypothesis number four was presented in Table 4. The following were cited in Table 4: variables, group sizes, means, standard deviations, F values, and p levels.

Table 4: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Gender, Family Structure, and Ethnic Group Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Gender (A)					
male	76	7.3	5.10	1.57	.2121
female	60	8.2	6.01		
Family Structure (D)					
biological parents	84	7.7	5.71		
mother or mother/stepfather	34	6.9	5.74	1.51	.2250
other	18	9.2	3.86		
Ethnic Group (G)					
white	110	7.1	5.56	2.63	.1072
other	26	10.1	4.70		
Interactions					
A x D				0.58	.5587
A x G				1.17	.2810
D x G				1.30	.2754
A x D x G				0.13	.8777

* The larger the value the greater the stereotyping.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 4 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number five that the differences among the Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to grade level, formal education of the father, and self reported grades would not be statistically detectable. Information pertaining to

composite null hypothesis number five was presented in Table 5. The following were cited in Table 5: variables, group sizes, means, standard deviations, F values, and p levels.

Table 5: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Grade Level, Formal Education of the Father, and Self Reported Grades Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Grade Level (B)					
4th	44	8.9	5.77		
5th	43	6.4	4.68	2.75	.0683
6th	49	7.7	5.82		
Formal Education of the Father (E)					
1**	73	8.5	5.00		
2	21	6.7	5.29	0.78	.4618
3	42	6.8	6.34		
Self Reported Grades (H)					
A's & B's	69	6.7	5.73		
B's & C's	30	9.6	5.68	1.37	.2546
C's, D's, & F's	14	7.2	3.56		
A's, B's, & C's	23	8.6	5.13		
Interactions					
B x E				1.04	.3917
B x H				0.48	.8245
E x H				0.90	.4832
B x E x H				0.78	.6032

* The larger the value the greater the stereotyping.
** 1= high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 5 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number six that the

differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to ethnic group, formal education of the mother, and size of school would not be statistically detectable. Information pertaining to composite null hypothesis number six was presented in Table 6. The following were cited in Table 6: variables, group sizes, means, standard deviations, F values, and p levels.

Table 6: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Ethnic Group, Formal Education of the Mother, and Size of School Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Ethnic Group (G)					
white	110	7.1	5.56	2.73	.1012
other	26	10.1	4.70		
Formal Education of the Mother (F)					
1**	72	8.6	5.26		
2	30	6.6	5.33	0.95	.3896
3	34	6.7	5.98		
Size of School (I)					
4A	53	7.2	5.54	0.57	.4530
2A	83	8.0	5.51		
Interactions					
G x F				0.45	.6408
G x I				0.00	.9586
F x I				0.79	.4551
G x F x I				0.22	.8011

* The larger the value the greater the stereotyping.
** 1= high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.

None of the 7p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 6 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number seven that the differences among the mean Occupational Sex-Stereotyping scores according to

gender, formal education of the father, and size of school would not be statistically detectable. Information pertaining to composite null hypothesis number seven was presented in Table 7. The following were cited in table 7: variables, group sizes, means, standard deviations, F values, and p levels.

Table 7: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Gender, Formal Education of the Father, and Size of School Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Gender (A)					
male	76	7.3	5.10	0.05	.8289
female	60	8.2	6.01		
Formal Education of the Father (E)					
1**	73	8.5	5.00		
2	21	6.7	5.29	1.84	.1635
3	42	6.8	6.34		
Size of School (I)					
4A	53	7.2	5.54	0.64	.4239
2A	83	8.0	5.51		
Interactions					
A x E				1.20	.3061
A x I				0.94	.3329
E x I				0.43	.6500
A x E x I				1.27	.2623

* The larger the value the greater the stereotyping.
** 1= high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 7 indicated no associations between independent variables and the dependent variable. All subgroups came from a common population.

It was hypothesized in composite null hypothesis number eight that the differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th,

and 6th grade students according to job status of the mother, formal education of the father, and ethnic group would not be statistically detectable. Information pertaining to composite null hypothesis number eight was presented in Table 8. The following were cited in Table 8: variables, group sizes, means, standard deviations, F values, and p values.

Table 8: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Job Status of the Mother, Formal Education of the Father, and Ethnic Group Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Job Status of the Mother (C)					
full time	74	7.7	5.72		
part time	42	7.7	5.52	0.54	.5853
none	20	7.7	4.94		
Formal Education of the Father (E)					
1**	73	8.5	5.00		
2	21	6.7	5.29	0.29	.7464
3	42	6.8	6.34		
Ethnic Group (I)					
white	110	7.1[a]	5.56	7.01	.0092
other	26	10.1[b]	4.70		
Interactions					
C x E				0.96	.4344
C x I				1.24	.2934
E x I				1.13	.2895
C x E x I				1.07	.3473

* The larger the value the greater the stereotyping.
** 1= high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.
[ab]Difference statistically detectable at the .05 level according to Bonferroni (Dunn) t-test for means.

One of the 7 p values was statistically detectable at the .05 level; therefore, the null hypothesis was rejected. The statistically detectable comparison was for the main effect ethnic group. Results cited in Table 8 indicated students of the other ethnic group reported statistically greater occupational sex-role stereotyping than white students.

It was hypothesized in composite null hypothesis number nine that the differences among the mean Occupational Sex-Stereotyping scores of 4th, 5th, and 6th grade students according to grade level, family structure, and formal education of the mother would not be statistically detectable. Information pertaining to composite null hypothesis number nine was presented in Table 9. The following were cited in Table 9: variables, group sizes, means, standard deviations, F values, and p levels.

Table 9: A Comparison of Mean Occupational Sex-Stereotyping Scores of 4th, 5th, and 6th Grade Students According to Grade Level, Family Structure, and Formal Education of the Mother Employing a Three-Way Analysis of Variance (General Linear Model)

Variable	n	M*	s	F value	p level
Grade Level (B)					
4th	44	8.9	5.77		
5th	43	6.4	4.68	0.52	.5984
6th	49	7.7	5.82		
Family Structure (D)					
biological parents	84	7.7	5.71		
mother or mother/stepfather	34	6.9	5.74	0.28	.7587
other	18	9.2	3.86		
Formal Education of the Mother (F)					
1**	72	8.6	5.26		
2	30	6.6	5.33	2.13	.1231
3	34	6.7	5.98		
Interactions					
B x D				0.73	.5752
B x F				0.91	.4625
D x F				2.04	.1129
B x D x F				1.74	.1301

* The larger the value the greater the stereotyping.
** 1= high school, GED, or less, 2= education beyond high school, less than a college degree, 3= college degree or more.

None of the 7 p values was statistically detectable at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 9 indicated no associations between independent variables and the dependent variable. All sub groups came from a common population.

Discussion

Summary

The purpose of the researcher was to investigate occupational sex-role stereotyping in 4th, 5th, and 6th grade students. The independent variables investigated were: gender, grade level, job status of the mother, family structure, formal education of the father, formal education of the mother, ethnic group, self reported grades, and size of school. The dependent variable was Occupational Sex-Stereotyping scores. The sample consisted of 136 elementary students. Nine composite null hypotheses were tested at the .05 level. Each composite null hypothesis was tested employing a three-way analysis of variance (general linear model).

A total of 41 comparisons were made plus 21 recurring. Of the 41 comparisons 9 were for main effects and 32 were for interactions. Of the 9 main effects one was statistically detectable at the .05 level. The statistically detectable main effect was for ethnic group. The results indicated that students of the other ethnic group (Hispanic, African American, Native American, and Asian) had statistically greater occupational sex-role stereotyping than white students.

Related Literature and the Results of the Present Study

Information cited in the present study did not support the findings of Archer (1984). Archer found there was not a statistically detectable difference between other ethnic groups and Caucasians in occupational sex-role stereotyping. The study conducted by Frost & Diamond (1979) compared 4th, 5th, and 6th grade students of ethnic groups. Partial support for the present study was found in that Black girls tended to select more traditional occupations than did white girls. The present study found students of other ethnic groups did more stereotyping than

did white students.

In a study conducted by Billings (1992), students from 2nd, 4th, and 6th grades made up the sample. Students from 2nd grade had statistically greater stereotyping than did those from 6th grade. The present study found no associations between grade level and occupational sex-role stereotyping.

Hageman & Gladding (1983) found girls did less occupational sex-role stereotyping as their age increased. Boys occupational sex-role stereotyping decreased as well but was continually greater than girls in comparison. The present study found no associations between gender and occupational sex-role stereotyping.

Generalizations

The results of the present study appeared to support the following generalizations:

1. students of the other ethnic group (Hispanic, African American, Native American, and Asian) occupational sex-role stereotype more than white students,
2. gender of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
3. grade level (4th, 5th, and 6th) is not associated with occupational sex-role stereotyping,
4. job status of the mothers of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
5. family structure in which 4th, 5th, and 6th, grade students live is not associated with occupational sex-role stereotyping,
6. formal education of the fathers of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,

7. formal education of the mothers of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping,
8. self reported grades of 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping, and
9. the size of school attended by 4th, 5th, and 6th grade students is not associated with occupational sex-role stereotyping.

Recommendations

The results of the present study appeared to support the following recommendations:

1. the study should be replicated with a large random sample,
2. the study should be replicated using additional independent variables,
3. the study should be replicated using a different instrument,
4. the study should be replicated using other grade levels, and
5. the study should be replicated using other geographical locations.

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Appendix A

Demographic Information Sheet

Demographic Information Sheet

Please circle the best answer for each question listed below.

I am a .....
- Girl
- Boy

Grade:
- 4th
- 5th
- 6th

Race:
- White
- Hispanic
- African American
- Native American
- Asian

What grades do you make?
- All A's
- Mostly A's and B's
- All B's
- Mostly B's and C's
- All C's
- Mostly C's and D's
- All D's
- Mostly D's and F's
- A's, B's, and C's

I live with .....
- both biological parents
- mother and stepfather
- mother
- father and stepmother
- father
- other (please explain) _____

_____

My mother has .....
- elementary ed. only
- some high-school
- a high-school diploma
- G. E. D.
- a vo-tech degree
- some college, but no degree
- college, 4 yr. degree
- college degree+

Does your mother have a job outside the home?
- yes
- no

If yes:
- full time
- part time

My father has .....
- elementary ed. only
- some high-school
- a high-school diploma
- G. E. D.
- a vo-tech degree
- some college, but no degree
- college, 4 yr. degree
- college degree+

Appendix B

Occupational Sex-Stereotyping Instrument

OCCUPATIONAL SEX-STEREOTYPING*

Circle "FEMALE ONLY" if you think only girls and women have the skill to do the job. Circle "MALE ONLY" if you think only boys and men have the skill to do the job. Circle "BOTH" if you think both females and males have the skill to do the job.

1. Zookeeper	FEMALE ONLY	MALE ONLY	BOTH
2. Fashion Designer	FEMALE ONLY	MALE ONLY	BOTH
3. Astronaut	FEMALE ONLY	MALE ONLY	BOTH
4. Chemical Engineer	FEMALE ONLY	MALE ONLY	BOTH
5. Singer	FEMALE ONLY	MALE ONLY	BOTH
6. Basketball Player	FEMALE ONLY	MALE ONLY	BOTH
7. Newsbroadcaster	FEMALE ONLY	MALE ONLY	BOTH
8. Baker	FEMALE ONLY	MALE ONLY	BOTH
9. Business Secretary	FEMALE ONLY	MALE ONLY	BOTH
10. Waitperson	FEMALE ONLY	MALE ONLY	BOTH
11. Computer Worker	FEMALE ONLY	MALE ONLY	BOTH
12. School Teacher	FEMALE ONLY	MALE ONLY	BOTH
13. Truck Driver	FEMALE ONLY	MALE ONLY	BOTH
14. Tennis Player	FEMALE ONLY	MALE ONLY	BOTH
15. Firefighter	FEMALE ONLY	MALE ONLY	BOTH
16. Model	FEMALE ONLY	MALE ONLY	BOTH
17. Police Officer	FEMALE ONLY	MALE ONLY	BOTH
18. Veterinarian	FEMALE ONLY	MALE ONLY	BOTH
19. Doctor	FEMALE ONLY	MALE ONLY	BOTH
20. Mechanic	FEMALE ONLY	MALE ONLY	BOTH
21. Farmer	FEMALE ONLY	MALE ONLY	BOTH
22. Scientist	FEMALE ONLY	MALE ONLY	BOTH
23. Artist	FEMALE ONLY	MALE ONLY	BOTH
24. Store Clerk	FEMALE ONLY	MALE ONLY	BOTH
25. Mail Carrier	FEMALE ONLY	MALE ONLY	BOTH
26. Airplane Pilot	FEMALE ONLY	MALE ONLY	BOTH
27. Lawyer	FEMALE ONLY	MALE ONLY	BOTH
28. Florist	FEMALE ONLY	MALE ONLY	BOTH
29. Nurse	FEMALE ONLY	MALE ONLY	BOTH
30. Heavy Equipment	FEMALE ONLY	MALE ONLY	BOTH

*Eichman, 1987, p.52

Appendix C

Letter from Lavonda L. Eichman, M. S.

March 28, 1995

Lavonda Eichman
Elementary School Counselor
USD #443
Dodge City, KS 67801

Miss Eichman,

I am writing in reference to your Occupational Sex-Stereotyping instrument. This was the instrument used in your thesis, "Implementing Change in Career Awareness Among Primary Students". I am in the process of researching sex-role stereotyping in fourth, fifth, and sixth graders. I would like to ask your permission to include this instrument in my thesis research.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

Darlene A. Smith
Elementary School Counselor

April 22, 1999

Darlene A. Smith
Elementary School Counselor
USD #215
Elkhart, KS 67950

Ms. Smith,

You have my permission to use the Occupational Sex Stereotyping Instrument in your thesis research.

Sincerely,

Lavonda Eichman

Lavonda Eichman
Elementary School Counselor

BEST COPY AVAILABLE

Appendix D

Letters to School Administration

March 28,1995

Mrs. Lola Lowen
Middle School Principal
USD #218
Elkhart, KS 67950

Mrs. Lowen,

I am writing to request permission to implement an Occupational Sex-Stereotyping instrument in two sections of fifth grade and two sections of sixth grade in your building. The information collected will be used in my thesis to complete the requirements for a Master of Science Degree at Fort Hays State University.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

Darlene A. Smith
Elementary School Counselor

March 30,1995

Mr. Lynn Thrall
Elementary School Principal
USD#218
Elkhart, KS 67950

Mr. Thrall,

I am writing to request permission to implement an Occupational Sex-Stereotyping instrument in two sections of fourth grade in your building. The information collected will be used in my thesis to complete the requirements for a Master of Science Degree at Fort Hays State University.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

Darlene A. Smith
Elementary School Counselor

March 30,1995

Ms. Ann Bruemmer
Elementary School Principal
Hugoton Elementary School
Hugoton, KS 67951

Ms. Bruemmer,

I am writing to request permission to implement an Occupational Sex-Stereotyping instrument in one section of fourth, fifth, and sixth grades in your building. The information collected will be used in my thesis to complete the requirements for a Master of Science Degree at Fort Hays State University.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

Darlene A. Smith
Elementary School Counselor

Appendix E

Letters of Approval from Administration

March 28,1995

Mrs. Lola Lowen
Middle School Principal
USD #218
Elkhart, KS 67950

Mrs. Lowen,

I am writing to request permission to implement an Occupational Sex-Stereotyping instrument in two sections of fifth grade and two sections of sixth grade in your building. The information collected will be used in my thesis to complete the requirements for a Master of Science Degree at Fort Hays State University.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

Darlene A. Smith
Elementary School Counselor

3-30-95
Darlene -
By all means get that thesis done! You not only have permission, but my "blessings." Please keep me informed as this project progresses
Lola A. Lowen
Principal
EMS

BEST COPY AVAILABLE

March 30,1995

Mr. Lynn Thrall
Elementary School Principal
USD #218
Elkhart, KS 67950

Mr. Thrall,

I am writing to request permission to implement an Occupational Sex-Stereotyping instrument in two sections of fourth grade in your building. The information collected will be used in my thesis to complete the requirements for a Master of Science Degree at Fort Hays State University.

I would appreciate your consideration of this request. Please return a written response regarding this matter. Thank you for your time.

Sincerely,

Darlene A. Smith

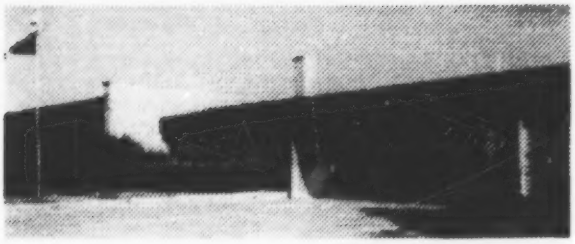
Darlene A. Smith
Elementary School Counselor

Darlene,

It will be fine for you to survey the fourth Grade.

Thank you

L Thrall



HUGOTON ELEMENTARY SCHOOL
304 E. 6th. Hugoton, KS 67951
(316) 544-4376

May 11, 1995

To Whom It May Concern,

Darlene Smith has permission to survey the students at Hugoton Elementary School for her thesis project

Sincerely,

Ann Bruemmer

Ann Bruemmer, Principal
Hugoton Elementary School

HUGOTON ELEMENTARY SCHOOL MISSION STATEMENT

Hugoton Elementary Staff will provide opportunities for all students to develop intellectually, physically, emotionally, and socially to become responsible, productive citizens in a changing society

Appendix F

Standardized Instruction Sheet

Instruction Sheet

My name is Darlene Smith and I am currently a counselor at Elkhart Schools. I am working towards completion of a thesis, which is one of the requirements for a Masters Degree from Fort Hays State University. I will give each of you a questionnaire and I would like for you to complete it in the next 30 minutes, You are not required to participate.

The papers I have handed out to you consist of an information sheet and an Occupational Sex-Stereotyping Instrument. Please find the page entitled Demographic Information. Answer each question as I read it aloud. Feel free to ask questions as we go along.

Now find the page entitled Occupational Sex-Stereotyping. Read the directions silently as I read them aloud. Circle only one answer for each question, as we read them together. Please do not discuss your answers. Are there any questions?

Be sure to check your papers and see that there is only one answer for each question. Do not leave a question blank.